Machining guidelines for Vesconite

Vesconite and Vesconite Hilube are easily machined to fine tolerances on standard metal working equipment.

Vesconite should not be clamped like a metal, but should be clamped carefully to avoid distortion.

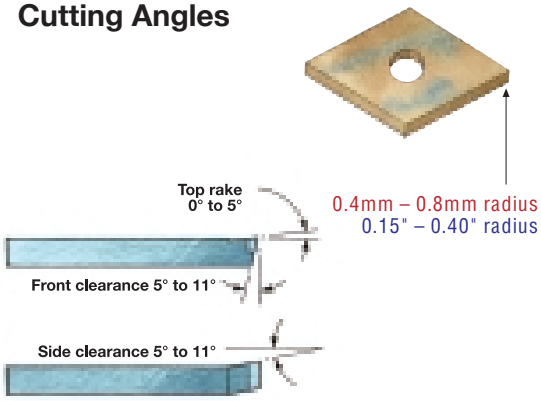
Cooling water should be used where possible to cool the cutting surface.

Take cuts no more than 2 mm (0.1") deep.

Allow the bush to cool before taking the final cut.

Cutting speeds - maximum of 300 m/min (1000 fpm)

Cutting Angles



Diameter mm	< 50	50-100	100-150	150-200	200-250	250-300	300-400	400-500
Diameter inches	< 2"	2-4"	4-6"	6-8"	8-10"	10-12"	12-16"	16-20"
RPM	600-2000	500-600	450	350	240	240	160	120

Cutting Feeds

Rough turning:	0,5 - 0,7 mm per revolution	0.020" - 0.030" per revolution
Finish turning:	0,3 - 0,4 mm per revolution	0.012" - 0.016" per revolution

Machining straight and flanged bushes in small quantities

STEP 1 **Cut to length** Allow extra length for chucking, parting and facing, usually 25 mm (1").

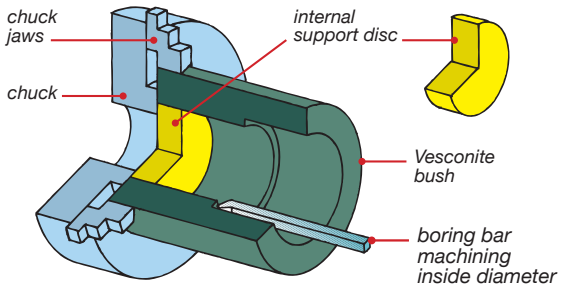
Cut bushing to length with a cut-off saw.

STEP 2 **Chuck with internal support disc**
Set the bush squarely in the chuck.

Use an internal support disc machined to size, made of any available material, approximately 10 to 25 mm thick ($1/2$" to 1").

Tighten the chuck lightly - only enough to support the bush. Vesconite should not be clamped like a metal.

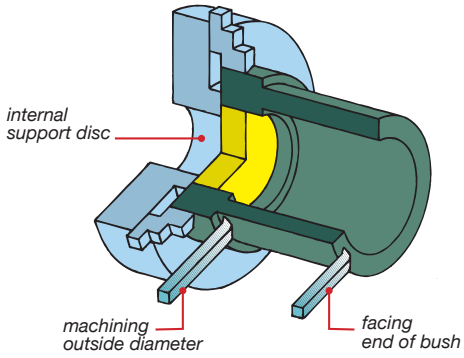
STEP 3 **Machine inside diameter** using a boring bar. Ensure that there is no excessive build-up of shavings inside the bush.



STEP 4 **Machine outside diameter** with an external turning tool.

Machine flange outside diameter if needed.

Face the end of the bush.



STEP 5 **Part to length** using a parting tool. Ensure that bush does not fall when parted.